

CITY OF JOLIET FIREFIGHTERS' PENSION FUND ANNUAL ACTUARIAL VALUATION FOR THE YEAR BEGINNING JANUARY 1, 2012

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Septmeber 14, 2012

The Pension Board City of Joliet Firefighters' Pension Fund Joliet, Illinois

#### **Dear Board Members:**

We are pleased to provide our formal annual Actuarial Valuation Report as of January 1, 2012, covering the City of Joliet Firefighters' Pension Fund. This report provides, among other things, the minimum annual contribution requirements of the Plan for the Plan Year commencing January 1, 2012, and ending on December 31, 2012 (which directly affects the City's tax levy in the 2013 fiscal year that is collected and deposited into the Pension Trust in fiscal year 2013). This valuation was based on the plan provisions as outlined in Section C of this report, the Plan participant data as provided by the City of Joliet (i.e., Plan Sponsor), and on the actuarial cost method and the set of actuarial assumptions as described in Section D of the report. The assumptions used in this valuation are the same as those used in the previous valuation.

This valuation also incorporates the Board approved modified funding policy equal to the sum of: (a) annual normal cost plus (b) amortization of unfunded liability as a level percent of pay between January 1, 2011, and January 1, 2046, plus (c) interest on (a) and (b) to date of payment, that is projected to produce a funded ratio of 100 percent by January 1, 2046. The contribution under this modified funding policy satisfies the statutory minimum funding requirements found in Public Act 96-1495.

Chapter 40, Act 5, Article 4 of the Illinois Compiled Statutes requires an actuarial balance sheet (i.e., actuarial valuation) be prepared by a qualified actuary in order to determine the annual tax levy to meet the annual actuarial requirements of the Pension Fund. Alex Rivera and Lance Weiss of Gabriel, Roeder, Smith & Company have the following qualifications:

**Alex Rivera** is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary with over 25 years of responsible experience in the actuarial and pension consulting field.

**Lance Weiss** is a Fellow of the Conference of Consulting Actuaries, a Member of the American Academy of Actuaries, and an Enrolled Actuary with over 30 years of responsible experience in the actuarial and pension consulting field.

The Pension Board City of Joliet Firefighters' Pension Fund Page 2

It is our understanding, in accordance with the Illinois Compiled Statutes, that the undersigned more than satisfy the minimum requirements as set forth in the referenced Pension Code as recently amended.

In addition, it is also our understanding that the Pension Code requires that a member of the American Academy of Actuaries perform the required annual actuarial valuation and does not mandate that the Illinois Department of Insurance's annual actuarial valuation of the Pension Fund be controlling or that the Department of Insurance accept or approve another actuarial valuation of the Pension Fund.

Both of the undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries (MAAA) to render the actuarial opinion contained herein.

We will be pleased to review this report with you at your convenience.

Alex Rivera Laneig. Win

Sincerely,

Alex Rivera, F.S.A., M.A.A.A.

Senior Consultant

Lance Weiss, E.A., , M.A.A.A.

Senior Consultant

#### Additional Disclosures Required by Actuarial Standards of Practice

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

### SECTION A

**VALUATION RESULTS** 

### SUMMARY OF ACTUARIAL VALUATION RESULTS

	Valuation Date as of	Ja	nuary 1, 2011	Ja	nuary 1, 2012
Employee	Number of Active Firefighters		205		205
Data	Number of Service Retirees		75		68
	Number of Disabled Lives		27		27
	Number of Widow Beneficiaries		29		34
	Number of Children Beneficiaries		0		0
	Number of Separated Deferred Firefighters		1		1
	Number of Handicapped Beneficiaries		0		0
	TOTAL		337		335
	Total Annual Salaries of Firefighters	\$	20,431,852	\$	21,949,202
Plan	Gross Actuarial Accrued Liability:				
Liabilities	Active Firefighters	\$	89,278,234	\$	103,541,471
	Retirees, Beneficiaries & Disabled		102,993,084		101,651,316
	TOTAL	\$	192,271,318	\$	205,192,787
	Actuarial Value of Assets at Valuation Date	\$	83,852,794	\$	90,201,985
	Unfunded (Overfunded) Actuarial Accrued Liability	\$	108,418,524	\$	114,990,802
	Funded Position of Plan's Gross Actuarial Accrued Liability <sup>2</sup>		43.6 %		44.0 %
		]	For the 2011	]	For the 2012
			Fiscal Year		Fiscal Year
Normal	Gross Annual Normal Cost	\$	6,614,801	\$	7,058,514
Cost	Less Expected Member Contributions				
	(for Applicable Plan Year)		1,931,832		2,075,297
	Net Annual Normal Cost (Municipality Paid)	\$	4,682,969	\$	4,983,217
	Net Annual Normal Cost (As a percentage of pay) 1		22.9 %		22.7 %

<sup>&</sup>lt;sup>1</sup> Percents above represent net annual normal cost expressed as percentages of covered Firefighters' salaries.

<sup>&</sup>lt;sup>2</sup> Equals the ratio of the actuarial value of assets to the total gross actuarial accrued liability.

## SUMMARY OF ACTUARIAL VALUATION RESULTS (CONTINUED)

#### Annual Contribution Requirements

Plan Year End	December 31, 2011	a <u>December 31, 2012</u> b
Net Annual Normal Cost (Municipality Paid)	\$4,682,969	\$4,983,217
Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability as a level percentage of payroll	4,821,980	5,202,270
Interest Adjustment to Expected Date of		
Payment into the Fund (Optional)	1,015,286	1,087,979
Total Minimum Annual Contribution		
Requirement for the Current Plan Year	\$10,520,235	\$11,273,466
Minimum Annual Contribution		
(As a percentage of pay)	51.5%	51.4%

<sup>&</sup>lt;sup>a</sup> Unfunded Actuarial Accrued Liability is amortized over a 35 year closed period.

The contributions shown above satisfy the statutory minimum funding requirements found in Public Act 96-1495 that employer contribution produces 90 percent funding by the end of fiscal year 2040. The statutory minimum funding requirement produces a contribution of \$10,208,000 or 43.15 percent of projected pay for the plan year ending December 31, 2012.

<sup>&</sup>lt;sup>b</sup> Unfunded Actuarial Accrued Liability is amortized over a 34 year closed period.

### DERIVATION OF EXPERIENCE GAIN (LOSS) YEAR ENDED JANUARY 1, 2012

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is expected that gains and losses will cancel each other over time, but year-to-year fluctuations are not uncommon. Detail on the derivation of the experience gain (loss) is shown below, along with a year-by-year comparative schedule.

1.	Unfunded Actuarial Accrued Liability at 01/01/2011	\$ 108,418,524
2.	Normal Cost Due at 01/01/2011	6,614,801
3.	Interest on (1) and (2) to 12/31/2011 (at 7.00% per annum)	8,052,333
4.	Contributions (Employer and Employee) applicable to the 2011 Plan Year, with interest to $12/31/2011$	13,335,044
5.	Expected Unfunded Actuarial Accrued Liability at $01/01/2012$ [(1) + (2) + (3) - (4)]	\$ 109,750,614
6.	Actual Unfunded Actuarial Accrued Liability at 01/01/2012	\$ 114,990,802
7.	Gain (Loss) for the 2011 Plan Year [(5) - (6)]	\$ (5,240,188)

Valuation		Experience Gain (Loss)		
Date		As % of Accrued Liability at		
January 01		the Prior Valuation Date 1		
	2001	1.15 %		
	2002	(0.13)%		
	2003	(6.65)%		
	2004	(2.42)%		
	2005	(0.88)%		
	2006	(0.89)%		
	2007	(9.08)%		
	2008	(2.66)%		
	2009	(4.45)%		
	2010	(9.18)%		
	2011	(1.58)%		
	2012	(2.73)%		

<sup>&</sup>lt;sup>1</sup> Excluding Plan and assumption changes.

#### **COMMENTS AND ANALYSIS**

The valuation results pertaining to the current Plan Year are analyzed and discussed in the following paragraphs.

Plan History

The following table provides a summary of the Plan's rate of return on assets and salary increase experience over the last 20 actuarial valuations performed by Gabriel, Roeder, Smith & Company:

Plan Year	Rate of Return	Salary Scale	
Ending	On Plan Assets	Increase	
12/31/1992	7.3 %	6.3 %	
12/31/1993	6.4	5.7	
12/31/1994	4.5	7.7	
12/31/1995	12.0	9.1	
12/31/1996	5.9	8.2	
12/31/1997	11.3	5.5	
12/31/1998	9.7	11.1	
12/31/1999	7.9	15.5	
12/31/2000	(1.2)	4.5	
12/31/2001	(1.0)	7.3	
12/31/2002	(1.4)	6.4	
12/31/2003	9.4	7.2	
12/31/2004	6.8	10.9	
12/31/2005	4.4	7.8	
12/31/2006	7.8	6.9	
12/31/2007	5.7	10.0	
12/31/2008	(13.3)	5.8	
12/31/2009	8.2	14.2	
12/31/2010	10.3	4.0	
12/31/2011	1.3	7.4	

The Salary Scale increase has averaged 8.0% over the last 20 years. We believe the 5.25% salary increase assumption continues to be a reasonable long-term assumption. The salary scale recognizes that members with less than three years of service receive higher pay increases.

As part of each annual valuation, we will review salary scale increases and determine whether the current assumption continues to be appropriate.

Over the same 20-year period, the Plan's assets have averaged an annual rate of investment return of 4.9%. We believe the 7.00% annual rate of return on Plan assets is within the range of reasonable assumptions. However, we recommend that the City monitor this assumption for continuing reasonableness at each future valuation.

## COMMENTS AND ANALYSIS (CONTINUED)

Analysis of
the Experience Gain
(Loss)

The experience gain(loss) reported on page A-3, is the net result of the following:

(a) From plan asset performance

\$ (4,693,763)

(b) Other sources ("net effect" of salary increases, terminations, new entrants, retirements, etc.)

(546,425)

Total Gain/(Loss): [(a) + (b)]

\$ (5,240,188)

# Changes in the Annual Contribution

The dollar amount of the plan's annual minimum required contribution of \$11,273,466 is approximately 7.2% higher than the level for the prior plan year of \$10,520,235. As a percentage of payroll, the contribution requirement is lower than last year (i.e., decreasing from 51.5% to 51.4%). The important factors producing this change are summarized as follows:

1.	Minimum Annual Contribution Requirement for prior	
	plan year without amendatory Act of the 93rd General	\$ 9,763,021
	Assembly <sup>1</sup>	

2.	Actual Asset Performance (based on actuarial value of	
	assets)	235,032

3.	Increase in Normal Cost and Amortization Amount	
	due to anticipated pay increases	420,809

4.	Changes in Plan Provisions due to the	amendatory	
	Act of the 93rd General Assembly		632,697

6.	Minimum Annual Contribution Requirement for	
	current plan year (sum of items 1 through 5)	\$ 11,273,466

<sup>1</sup>(P.A. 93-0689, effective 7-1-04.)

### COMMENTS AND ANALYSIS (CONTINUED)

#### Comments on Actuarial Value of Assets

Government accounting standards mandate the use of market value of assets or market-related value of assets for accounting purposes. The Pension Fund used market-related value of assets for both government accounting and funding purposes. This market-related value of assets will recognize gains and losses due to return on plan assets over a four-year period. Hence, only a portion of this year's investment loss (see Section E for details) is included in the current year actuarial value of assets. The remainder of the gain or loss will be incorporated into Pension Fund assets over the next three years. The purpose of this technique is to minimize contribution volatility due to fluctuations in the market value of assets. Finally, receivables for plan years prior to the current plan year which are not in Plan assets by December 31, 2011, are not included in assets for Government accounting standards purposes but are included in assets for funding purposes.

### GASB Statements No. 25 and 27

GASB Statement No. 25 is applicable to fiscal years beginning after June 15, 1996. It was adopted by the City of Joliet Firefighters Pension Fund in the January 1997 report. GASB Statement 27 is applicable to fiscal years beginning after June 15, 1997. It was adopted by the City of Joliet in the January 1998 report. A transition pension liability (asset) has been developed under Statement No. 27 equal to the cumulative difference between the actuarially determined funding requirement and the actual amount contributed for fiscal years 1987 to the date GASB 27 is adopted. As of the adoption date, all outstanding pension liabilities (assets) are adjusted to equal the transition NPO.

# **SECTION B**PROJECTIONS

### City of Joliet Firefighters Pension Fund Actuarial Valuation Projection Results Based on P.A. 96-1495 as of January 1, 2012 (Based on Projected Unit Credit Cost Method) (\$ in Thousands)

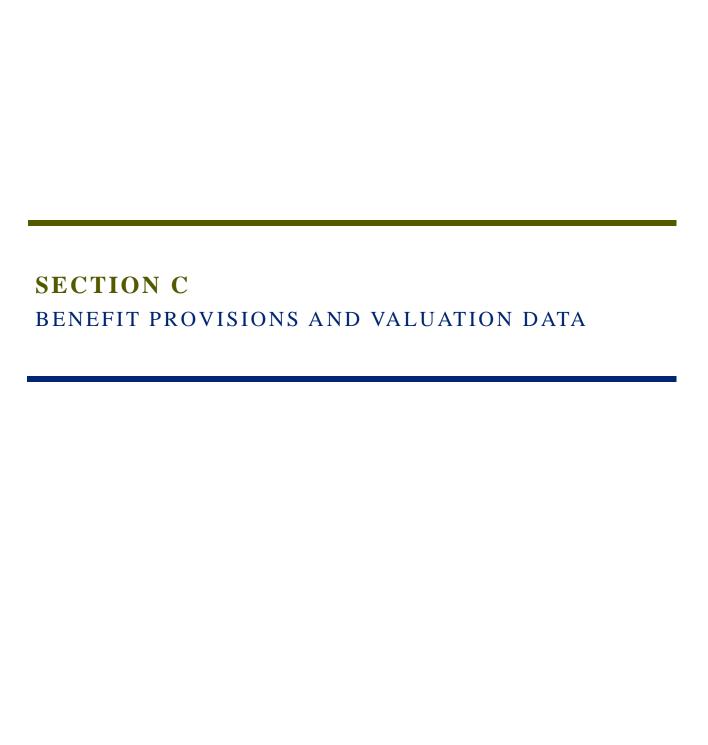
<u>Year</u>	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets <sup>1</sup>	Unfunded Liability	Actuarial Value Funded Ratio	Uncapped Payroll	Capped Payroll	Employer Normal Cost	Statutory Minimum Contribution	Statutory Contribution % of Projected Pay	Employee Contributions	Benefit Payments
2012	\$199,968	\$78,051	\$81,263	\$118,705	40.64%	\$21,949	\$21,949	\$4,915	\$10,208	43.15%	\$2,075	\$8,043
2013	213,165	88,155	90,296	122,869	42.36%	22,811	22,811	5,133	10,598	43.15%	2,157	8,446
2014	227,193	98,308	99,378	127,815	43.74%	23,657	23,657	5,336	11,006	43.15%	2,237	8,956
2015	241,980	109,127	109,127	132,852	45.10%	24,561	24,557	5,511	11,458	43.15%	2,322	9,566
2016	257,454	120,582	120,582	136,872	46.84%	25,506	25,485	5,676	11,911	43.15%	2,410	10,183
2017	273,641	132,755	132,755	140,886	48.51%	26,555	26,496	5,814	12,371	43.15%	2,505	10,879
2018	290,496	145,625	145,625	144,870	50.13%	27,603	27,473	5,927	12,839	43.15%	2,598	11,667
2019	307,937	159,151	159,151	148,786	51.68%	28,671	28,428	6,015	13,332	43.15%	2,688	12,554
2020	325,873	173,280	173,280	152,593	53.17%	29,756	29,342	6,087	13,853	43.15%	2,774	13,523
2021	344,232	187,993	187,993	156,239	54.61%	30,897	30,249	6,149	14,388	43.15%	2,860	14,539
2022	362,983	203,309	203,309	159,674	56.01%	32,105	31,152	6,189	14,949	43.15%	2,945	15,597
2023	382,087	219,241	219,241	162,846	57.38%	33,343	32,003	6,215	15,534	43.15%	3,026	16,713
2024	401,485	235,794	235,794	165,691	58.73%	34,644	32,828	6,228	16,137	43.15%	3,104	17,930
2025	421,079	252,931	252,931	168,148	60.07%	36,001	33,615	6,224	16,677	43.15%	3,178	19,160
2026	440,846	270,691	270,691	170,155	61.40%	37,397	34,336	6,130	17,257	43.15%	3,246	20,566
2027	460,525	288,866	288,866	171,659	62.73%	38,650	34,761	5,988	17,865	43.15%	3,287	22,099
2028	479,883	307,365	307,365	172,518	64.05%	39,994	35,145	5,812	18,526	43.15%	3,323	23,707
2029	498,782	326,158	326,158	172,624	65.39%	41,402	35,445	5,617	19,217	43.15%	3,351	25,375
2030	517,095	345,251	345,251	171,844	66.77%	42,934	35,726	5,394	19,926	43.15%	3,378	27,135
2031	534,654	364,598	364,598	170,057	68.19%	44,536	35,913	5,133	20,684	43.15%	3,396	28,953
2032	551,297	384,165	384,165	167,133	69.68%	46,179	35,978	4,860	21,471	43.15%	3,402	30,840
2033	566,861	403,936	403,936	162,925	71.26%	47,936	35,997	4,573	22,301	43.15%	3,404	32,766
2034	581,210	423,911	423,911	157,299	72.94%	49,759	35,913	4,275	23,199	43.15%	3,396	34,719
2035	594,205	444,109	444,109	150,096	74.74%	51,683	35,763	3,988	24,171	43.15%	3,381	36,666
2036	605,760	464,617	464,617	141,144	76.70%	53,763	35,621	3,732	25,209	43.15%	3,368	38,551
2037	615,870	485,596	485,596	130,273	78.85%	56,016	35,521	3,516	26,316	43.15%	3,359	40,335
2038	624,583	507,259	507,259	117,324	81.22%	58,424	35,456	3,351	27,491	43.15%	3,352	41,996
2039	631,986	529,854	529,854	102,132	83.84%	60,988	35,452	3,243	28,739	43.15%	3,352	43,505
2040	638,210	553,679	553,679	84,530	86.76%	63,712	35,530	3,199	7,442	10.69%	3,359	44,848
2041	643,419	579,077	579,077	64,342	90.00%	66,604	35,722	3,208	7,578	10.42%	3,378	46,027
2042	647,782	583,004	583,004	64,778	90.00%	69,623	35,992	3,260	7,730	10.18%	3,403	47,051
2043	651,452	586,307	586,307	65,145	90.00%	72,748	36,333	3,341	7,889	9.96%	3,435	47,959
2044	654,542	589,088	589,088	65,454	90.00%	75,961	36,730	3,435	8,048	9.75%	3,473	48,793
2045	657,109	591,398	591,398	65,711	90.00%	79,222	37,136	3,535	8,203	9.54%	3,511	49,568
2046	659,185	593,266	593,266	65,918	90.00%	82,547	37,561	3,635	8,352	9.34%	3,551	50,288

<sup>&</sup>lt;sup>1</sup> Pursuant to P.A. 96-1495, the actuarial value of assets was set equal to the market value of assets at March 30, 2011.

City of Joliet Firefighters Pension Fund
Actuarial Valuation Projection Results Based on 34 Years Closed Amortization as of January 1, 2012 (Based on Entry Age Normal Cost Method)
(\$ in Thousands)

Fiscal Year	Actuarial Accrued Liability	Market Value of Assets	Actuarial Value of Assets	Unfunded Liability	Actuarial Value Funded Ratio	Uncapped Payroll	Capped Payroll	Employer Normal Cost	Annual Required Contribution <sup>1</sup>	ARC as	City Contribution	City Contribution % of Pay	Employee Contributions	Benefit Payments
2012	\$205,193	\$78,051	\$90,202	\$114,991	43.96%	\$21,949	\$21,949	\$4,983	\$11,098	50.56%	\$11,273	51.36%	\$2,075	\$8,043
2012	218,801	88,155	100,663	118,138	46.01%	22,811	22,811	5,117	11,421	50.56%	11,686	51.23%	2,157	\$8,045 8,446
2013	233,176	99,411	111,778	121,398	47.94%	23,657	23,657	5,250	11,732	49.59%	12,116	51.22%	2,137	8,956
2014	248,257	111,433	123,146	125,111	49.60%	24,561	24,557	5,370	12,055	49.08%	12,571	51.18%	2,322	9,566
2016	263,983	124,198	136,351	127,633	51.65%	25,506	25,485	5,490	12,318	48.30%	12,977	50.88%	2,410	10,183
2017	280,393	137,776	150,322	130,072	53.61%	26,555	26,496	5,586	12,706	47.85%	13,370	50.35%	2,505	10,879
2018	297,438	152,102	165,027	132,411	55.48%	27,603	27,473	5,665	13,087	47.41%	13,754	49.83%	2,598	11,667
2019	315,043	167,114	180,411	134,632	57.27%	28,671	28,428	5,725	13,463	46.96%	14,132	49.29%	2,688	12,554
2020	333,123	182,748	196,409	136,714	58.96%	29,756	29,342	5,774	13,842	46.52%	14,509	48.76%	2,774	13,523
2021	351,611	198,950	212,977	138,635	60.57%	30,897	30,249	5,813	14,225	46.04%	14,889	48.19%	2,860	14,539
2022	370,476	215,713	230,106	140,370	62.11%	32,105	31,152	5,831	14,603	45.48%	15,260	47.53%	2,945	15,597
2023	389,677	233,032	247,784	141,894	63.59%	33,343	32,003	5,833	14,981	44.93%	15,628	46.87%	3,026	16,713
2024	409,155	250,872	265,980	143,175	65.01%	34,644	32,828	5,822	15,365	44.35%	15,998	46.18%	3,104	17,930
2025	428,810	269,161	284,626	144,184	66.38%	36,001	33,615	5,792	15,747	43.74%	16,362	45.45%	3,178	19,160
2026	448,615	287,913	303,730	144,884	67.70%	37,397	34,336	5,687	16,074	42.98%	16,659	44.55%	3,246	20,566
2027	468,311	306,967	323,072	145,239	68.99%	38,650	34,761	5,549	16,386	42.40%	16,939	43.83%	3,287	22,099
2028	487,695	326,115	342,490	145,204	70.23%	39,994	35,145	5,388	16,695	41.74%	17,210	43.03%	3,323	23,707
2029	506,637	345,262	361,900	144,737	71.43%	41,402	35,445	5,212	17,015	41.10%	17,486	42.23%	3,351	25,375
2030	525,021	364,331	381,235	143,786	72.61%	42,934	35,726	5,017	17,341	40.39%	17,759	41.36%	3,378	27,135
2031	542,688	383,221	400,389	142,300	73.78%	44,536	35,913	4,793	17,669	39.67%	18,022	40.47%	3,396	28,953
2032	559,490	401,848	419,270	140,219	74.94%	46,179	35,978	4,559	18,017	39.02%	18,295	39.62%	3,402	30,840
2033	575,271	420,102	437,789	137,482	76.10%	47,936	35,997	4,309	18,386	38.36%	18,574	38.75%	3,404	32,766
2034	589,896	437,922	455,878	134,018	77.28%	49,759	35,913	4,049	18,787	37.76%	18,867	37.92%	3,396	34,719
2035	603,237	455,244	473,483	129,754	78.49%	51,683	35,763	3,798	19,245	37.24%	19,194	37.14%	3,381	36,666
2036	615,211	472,047	490,602	124,609	79.75%	53,763	35,621	3,565	19,781	36.79%	19,568	36.40%	3,368	38,551
2037	625,807	488,395	507,312	118,494	81.07%	56,016	35,521	3,352	20,413	36.44%	19,994	35.69%	3,359	40,335
2038	635,058	504,415	523,744	111,314	82.47%	58,424	35,456	3,165	21,166	36.23%	20,479	35.05%	3,352	41,996
2039	643,030	520,267	540,065	102,965	83.99%	60,988	35,452	3,010	22,079	36.20%	21,033	34.49%	3,352	43,505
2040	649,831	536,164	556,497	93,333	85.64%	63,712	35,530	2,894	23,211	36.43%	21,668	34.01%	3,359	44,848
2041	655,600	552,360	573,307	82,293	87.45%	66,604	35,722	2,812	24,650	37.01%	22,379	33.60%	3,378	46,027
2042	660,481	569,139	590,774	69,707	89.45%	69,623	35,992	2,758	26,577	38.17%	23,172	33.28%	3,403	47,051
2043	664,613	586,791	609,192	55,421	91.66%	72,748	36,333	2,730	29,412	40.43%	24,053	33.06%	3,435	47,959
2044	668,097	605,587	628,840	39,256	94.12%	75,961	36,730	2,718	34,417	45.31%	25,042	32.97%	3,473	48,793
2045	670,986	625,782	649,991	20,995	96.87%	79,222	37,136	2,717	47,921	60.49%	26,245	33.13%	3,511	49,568
2046	673,315	647,646	673,019	296	99.96%	82,547	37,561	2,728	28,396	34.40%	3,347	4.05%	3,551	50,288
2047	675,113	671,577	674,813	300	99.96%	85,944	38,006	2,748	6,284	7.31%	3,374	3.93%	3,593	50,958

<sup>&</sup>lt;sup>1</sup> Based on an amortization period equal to the lesser 30 years and the amortization period used to determine the City's Contribution



## BRIEF SUMMARY OF PLAN PROVISIONS (JANUARY 1, 2012)

Plan

Firefighters Pension Fund as Incorporated in Chapter 40, Act 5, Article 4 of the Illinois Complied Statutes.

Effective Date

Enacted:

March 18, 1963

Last Amended Effective:

January 1, 2012

### Eligibility to Participate

Generally, any person who is in the Firefighters Department of a city, village or incorporated town (whose population is 500,000 or less) which has adopted the provisions of Chapter 40, Act 5, Article 4 of the Illinois Compiled Statutes concerning Firefighters' pensions, is eligible to participate, subject to the following:

- (a) The person has attained age 18 but not age 35 at the time of the first appointment; and
- (b) Within three months after receiving his/her first appointment (or within three months after any re-appointment), the person makes written application to the Board to be covered under the provisions of the Article.

#### NOTE:

If the person had been regularly enrolled as a volunteer Firefighter for 5 years immediately preceding the time that the municipality began employing him/her full time, the age limitation in (a) above does not apply.

Employee Contributions (Mandatory) In order to participate in the plan, each Firefighter must contribute 9.455% of his/her regular salary. "Salary" in this instance excludes overtime pay, holiday pay, bonus pay, merit pay or any other cash benefit over and above the salary established by the appropriation ordinance. Prior to July 1, 2004, each Firefighter had to contribute 8.455% of his/her regular salary.

Creditable Service

"Creditable Service" is the time period during which a person serves as a Firefighter of a municipality. Furloughs and Leave of Absences without pay exceeding 30 days in any one year are not counted unless such periods are attributable to illness or accident. Time attributable to disability absence for which the Firefighter does not receive disability pension benefits will be counted as "Creditable Service".

Furloughs and Leave of Absence <u>less</u> than 30 days in any one year may be included in "Creditable Service" if the Firefighter makes the regular employee contributions to the Fund he/she would have made if he/she had not been on the furlough or leave of absence. Such contributions must be made not more than 90 days following the end of the furlough or leave of absence.

In addition, all periods of service in the Military, Naval or Air Forces of the United States of America, entered into when the person was an active Firefighter and up to eight Years of Service as an officer in a statewide firefighters' association while on leave of absence from a municipality's payroll, shall be counted as "Credited Service", provided that the Firefighter contributes to the Fund the amount he/she would have paid had he/she been a regular contributor during such military service; in general, not more than five years may be counted under this provision. Credited Service shall not include time spent as a volunteer Firefighter whether or not compensation was received.

Eligibility For and Amount of Regular Retirement Benefits

I. Eligibility —
Age 50 (or
More) and 20
or More Years
of Creditable
Service

Benefit:

A Firefighter who is age 50 (or more) and has 20 years or more of Creditable Service and is no longer a Firefighter is entitled to 1/2 of the monthly salary attached to the rank held by him/her at the date of actual retirement.

For Creditable Service over 20 years, the monthly pension is increased as follows:

• 1/12 of 2.5% of the Firefighter's monthly salary for each additional year over 20 to the limitation that the monthly pension does not exceed 75% of his/her monthly salary.

Notwithstanding the above, as of January 1, 1999, no Pension in effect or granted with 20 or more Years of Service after May 1, 1993 is to be less than \$600.00 per month. This minimum is increased to \$800.00 per month on January 1, 2000, \$1,000.00 per month on January 1, 2001, \$1,030.00 per month on July 1, 2004, \$1,060.90 per month on July 1, 2005, \$1,092.73 per month on July 1, 2006, \$1,125.51 per month on July 1, 2007, \$1,159.27 per month on July 1, 2008.

II. Eligibility—
Age 60 (or
More) and 10
(but Less than
20) Years of
Creditable
Service

A Firefighter who is age 60 or more and has at least 10 Years (but less than 20) of Creditable Service and who is no longer a Firefighter, is entitled to a monthly pension payable for life based on the monthly salary attached to the rank held by him/her at the date of retirement or separation from service according to the following schedule:

For 10 Years of Service —	15.0% of salary;
For 11 Years of Service —	17.6% of salary;
For 12 Years of Service —	20.4% of salary;
For 13 Years of Service —	23.4% of salary;
For 14 Years of Service —	26.6% of salary;
For 15 Years of Service —	30.0% of salary;
For 16 Years of Service —	33.6% of salary;
For 17 Years of Service —	37.4% of salary;
For 18 Years of Service —	41.4% of salary;
For 19 Years of Service —	45.6% of salary;

Notwithstanding the foregoing, a Firefighter affected by the above shall not be entitled to a pension benefit if the option for a refund of employee contributions was exercised when the Firefighter last separated from service or if he/she is entitled to a disability pension benefit.

# III. Pension Allowance Increases

- A Firefighter who retired from service with 20 or more years of Creditable Service on or before May 1, 1971, is entitled to an increase of 2% of his/her original monthly pension for each year the Firefighter was in receipt of pension payments; such increase takes effect in the January of the year following the year in which he/she attains age 65, or January of 1972, if then age 65. Each subsequent January, the monthly pension is increased by 2% of the original monthly pension amount. Beginning January, 1976, the rate of such increases was raised to 3% of the original monthly pension.
- A Firefighter who retired from service after May 1, 1971 and prior to January 1, 1986 is entitled to an increase of 2% of his/her original monthly pension either upon: (a) the first of the month following the first anniversary of his/her date of retirement if he/she was age 60 or more on that date, or (b) the first of the month following the Firefighter's attainment of age 60 (if such occurs after the first anniversary of his/her retirement date). Each subsequent January, the monthly pension is increased by 2% of the original monthly pension amount. Beginning January, 1976, the rate of such increase was raised to 3% of the original monthly pension. . In July 2009, a Firefighter who retired before July 1, 1977 had his/her benefit recalculated and increased to reflect the amount that he/she would have received in July 2009 had he/she been receiving a 3% compounded increase for each year he/she received pension payments after January 1, 1986, plus any increases in pension received for each year prior to January 1, 1986. In each January thereafter, he or she shall receive an additional increase of 3% of the amount of the pension then being paid.
- A Firefighter who retired from service on or after January 1, 1986 is entitled to an increase of 3% of his/her original monthly pension for each full year that has elapsed since the pension began. This occurs either upon: (a) the first of the month following the anniversary of his/her date of retirement if he/she was age 55 or older on that date, or (b) the first of the month following the Firefighter's attainment of age 55 (if such occurs after the first anniversary of his/her retirement date). Each subsequent January, the monthly pension is increased by 3% of the immediately preceding year's pension amount.

• Notwithstanding the provisions of the second paragraph listed above, a Firefighter who retired from service after January 1, 1977 and prior to January 1, 1986 and did not receive a pension increase before May 1, 1987, is entitled to a 3% increase of his/her original monthly pension for each full year that has elapsed since the pension began. This occurs on the first day of the month following either: (a) the first anniversary of the date of retirement, or (b) the attainment of age 55, or (c) May 1, 1987. Each subsequent January, the monthly pension is increased by 3% of the immediately preceding year's pension amount.

Eligibility For and Amount of Disability Benefits

I. Disability
Incurred in the
Line of Duty

- a) If a Firefighter is injured or suffers an accident or sickness as the result of carrying out his/her duties as a Firefighter (even if those duties take him/her to a place away from the municipality in which he/she serves as a Firefighter, and assuming such duties are related to the fire protection service of such municipality), then such a disabled Firefighter is entitled to a disability retirement pension equal to the greater of: (i) the Firefighter's accrued pension benefit at the date of disability or (ii) 65% of the monthly salary attached to the rank held by him/her in the Fire Department at the date he/she is removed from the municipality's Fire Department payroll.
- b) A Firefighter who is entitled to disability payments, as discussed in (a) above, also has the right to receive a benefit of \$20 per month for every unmarried child less than 18 years of age.

The total amount of the benefits described in both (a) and (b) above shall not exceed 75% of the amount of salary the Firefighter was receiving at the time of the grant of the disability benefit.

II. Disability on Account of Occupational Hazards a) If a Firefighter who has completed 5 or more Years of Service is unable to perform his/her duties in the Fire Department by reason of heart disease, tuberculosis, disabling cancer, or any disease of the lungs or respiratory tract, resulting solely from his/her service as a Firefighter, then he/she is entitled to an occupational disease disability pension equal to the greater of: (i) the Firefighter's accrued pension benefit at the date of disability or (ii) 65% of his/her salary at the time of his/her removal from the Fire Department payroll.

a) A Firefighter who is entitled to a disability payments as described in (a) above also has the right to receive a benefit of \$20.00 per month for every unmarried child less than 18 years of age and who is dependent upon the Firefighter for financial support.

The total amount of the benefits described in both (a) and (b) above are not to exceed 75% of the amount of salary the Firefighter was receiving at the time of the grant of the disability benefit.

III. Disability Due to Occurrences Unrelated to Duties If a Firefighter, who has 7 years of Creditable Service, becomes mentally or physically disabled as the result of any cause other than the performance of an act or acts of duty, he/she is entitled to a disability pension equal to 50% of the monthly salary attached to the rank held by him/her in the Fire Department at the date he/she is removed from the municipality's Fire Department payroll.

IV. Special
Disability
Pension Option

A Firefighter who is receiving any form of disability pension and whose Creditable Service plus years of disability equals 20 or more and who is age 50 or older may elect to retire from the Fire Department by submitting a written application to the Board. His/her lifetime retirement pension will be equal to the same amount he/she was entitled to as a disabled Firefighter as of the date he/she was removed from Municipality's payroll for disability. A Firefighter who exercises this option is entitled to the automatic 3% per annum increase in benefits.

If a Firefighter who is on any form of disability pension accumulates enough Creditable Service to be eligible for a pension (at least 10 years at age 60 or at least 20 years at age 50 or more), he/she may elect to permanently retire from the Fire Department by submitting a written application to the Board. The Firefighter would be entitled to a lifetime pension based on the salary attached to the rank he/she held in the Fire Department as of the date of his/her election to retire. A Firefighter who exercises this option is entitled to the automatic 3% per annum increase in benefits.

V. Disability
Pension
Allowance
Increase

A Firefighter who is receiving a disability pension is entitled to receive an automatic increase effective January 1, 1974 and upon the attainment of age 60. At this date, the monthly pension is increased by 2% of the original monthly pension for each year the Firefighter was in receipt of monthly pension payments. Each subsequent January, the monthly pension is again increased by 2% of the original monthly pension amount. Effective January, 1976, the rate of such increase was raised to 3% of the original monthly pension.

Death Benefits to Surviving Spouse or Dependents

I. Surviving Spouse's Benefit

If an active Firefighter dies while in the line of duty as a result of any injuries or if a Firefighter sustains injuries from which he/she thereafter dies, then the surviving spouse is entitled to a monthly pension equal to 100% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department. The benefit is payable to the surviving spouse for life.

If an active Firefighter dies as a result of any illness or accident unrelated to duty <u>or</u> if a Firefighter dies from any cause while receiving disability pension benefits, <u>or</u> if a Firefighter dies during his/her retirement (after 20 years of service), then his/her surviving spouse is entitled to a monthly pension equal to 100% of the monthly retirement pension earned by the deceased firefighter at the time of death. This benefit is payable to the surviving spouse for life. Previously, the surviving spouse was entitled to a monthly pension equal to 54% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department.

Beginning January 1, 1999, the minimum amount payable under this provision is \$600.00 per month for both current and future surviving spouses. This minimum is increased to \$800.00 per month on January 1, 2000, \$1,000.00 per month on January 1, 2001, \$1,030.00 per month on July 1, 2004, \$1,060.90 per month on July 1, 2005, \$1,092.73 per month on July 1, 2006, \$1,125.51 per month on July 1, 2007, \$1,159.27 per month on July 1, 2008.

#### II. Dependent's Benefit

The dependent's benefit is applicable in the event of the death of the Firefighter under the conditions enumerated above for the surviving spouse's benefit. The guardian (spouse or otherwise) of any minor child (or children), including a child who had been conceived but not yet born, is entitled to a monthly benefit equal to 12% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department prior to his/her death. Such benefit is payable for each such child until the child attains age 18 or marries, if earlier.

If the deceased Firefighter leaves no surviving spouse or unmarried minor children under age 18, but leaves a dependent father or mother, each one is entitled to a monthly benefit equal to 18% of the monthly salary attached to the rank the Firefighter held on his/her last day of service with the Fire Department.

Notes: (a) The aggregate above monthly death benefits are not to exceed 75% of the monthly salary of the deceased Firefighter.

- (b) Adopted children are entitled to the same benefits as provided for natural children, if adopted before the Firefighter attained age 50.
- (c) If the Firefighter leaves no surviving spouse, unmarried children under the age of 18 or dependent father or mother, the Board will refund to his/her estate the amount of his/her accumulated contributions, less any amount of pension payments made to the deceased Firefighter while he/she was living.

Termination of Employment Benefits.

> I. Refund of Employee Contributions

A Firefighter who has less than 20 Years of Service and who resigns or is discharged (and has not received any disability payments), is entitled to a refund of his/her total amount contributed to the fund during his/her period of service. If the Firefighter should be subsequently re-employed, he/she must repay to the fund the amount of refund which he/she received before commencing service. When repayment is made, the Firefighter will receive credit for the previous Years of Service for which he/she received his/her refund.

#### II. Re-entry Into Service

- If a retired Firefighter (who is receiving pension benefits) re-enters active service, his/her pension benefits will cease while in active service. If he/she again retires, his/her monthly payments will resume in the same amount as he/she had received as a pensioner.
- If a "deferred" pensioner reenters service and remains in service for <u>less</u> than three years, and then again retires or is discharged, his/her pension will be based on the salary attached to the rank he/she held in the Fire Department at the date of his/her earlier retirement. Conversely, if the pensioner re-enters service and remains in service for three or more years, and again retires or is discharged, his/her pension will be based on the salary attached to the rank he/she held in the Fire Department at the date of his/her last retirement.

Notwithstanding the foregoing, if a pensioner or deferred pensioner returns to active service and is subsequently injured (and the injury is not relate to an injury for which the member was previously receiving benefits), the 3 year requirement does not apply in order for the member to receive his/her pension based on his/her rate of pay at the time of his/her new injury.

### Financing of Pension Benefits

Pension benefits are to be funded by "employee" deductions from wages and salaries of Firefighters and by a property tax levied by the Municipality. The amount derived from these two sources should equal the sum sufficient to meet the annual actuarial requirements of the pension fund as stated below:

(1) Provide actuarial reserves for the pensions and benefits earned by the Firefighters during the year (the reserve requirement is to be computed at a rate of not less than 17.5% of the salaries and wages earned by the Firefighters during the year),

#### And

(1) In a municipality that has a reserve less than the actuarial requirements of the fund, the Board of the Pension Fund shall designate the proportionate amount needed annually to insure the accumulation of such actuarial reserve over a period of 35 years subsequent to January 1, 2011, in the case of pension funds in operation on that date.

The minimum funding requirements under P.A. 96-1495 are disclosed on the following page.

#### Administration

The Firefighters' Pension Fund is administered by a Board of Trustees located in each municipality maintaining a Pension Fund for its Firefighters. Its duties are: to control and manage the pension fund, to enforce the collection of the contributions, to hear and determine applications for pensions, to authorize payment of pension, to establish rules, to pay expenses, to invest funds, and to keep records.

#### Benefits Under P.A. 96-1495

Under P.A. 96-1495, members of the City of Joliet Firefighters' Pension Fund hired after December 31, 2010, are eligible for the following tier-two benefits:

- Minimum retirement eligibility at age 55 with 10 years of service with annuity based on accrual rate of 2.5 percent, subject to a maximum of 75 percent;
- Minimum retirement eligibility at age 50 with 10 years of service with annuity based on accrual rate of 2.5 percent, reduced by ½ of a percent per month for retirement prior to age 55, subject to a maximum of 75 percent;
- Final average salary based on 96 consecutive months within last 120 months;
- Annual salary capped at \$106,800, indexed annually at lesser of 3.0 percent and 50 percent of CPI-U;
- COLA equal to lesser of 3.0 percent and 50 percent of CPI-U, commencing at age 60, with no cap, applied to originally granted retirement annuity;
- Widow benefits at 66-2/3 percent of retiree's benefit; and,
- Widow COLAs equal to the lesser of 3.0 percent and 50 percent of CPI-U, commencing when the survivor reaches age 60 and applied to originally granted retirement annuity.

#### Minimum Funding Requirements under P.A. 96-1495

P.A. 96-1495 includes the following changes to the statutory funding requirements:

- Employer contribution (combined with members contributions and other fund revenue) produces 90 percent funding by the end of fiscal year 2040
- Contributions based on open group projection and level percent of pay financing
- Actuarial liabilities based on projected unit credit cost method
- Assets marked to market at March 30, 2011. For fiscal years after March 30, 2011, actuarial value of assets based on 5-year smoothing.

If the City does not make the statutorily required contributions, then the State, starting in FY 2016, could withhold State grants to the City, and directly deposit the withheld funds into the City of Joliet Police Officers' Pension Fund. The withheld funds are limited to 33 percent of total State grants to the City in FY 2016, 67 percent in FY 2017, and 100 percent on and after FY 2018.

The contribution determined in accordance with P.A. 96-1495 serves as a minimum contribution requirement. The funding policy adopted for this valuation exceeds the minimum contribution established under this Public Act.

### ACTIVE MEMBERS AS OF JANUARY 1, 2012 BY ATTAINED AGE AND YEARS OF SERVICE

Attained			<u>Year</u>	s of Serv	vice to V	aluation	<u>Date</u>				Totals  Valuation
Age	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	Totals	Payroll
Under 20										0	\$ 0
20-24										0	0
25-29		8	6							14	1,320,456
30-34		4	31	9						44	4,348,952
35-39		4	25	12	6					47	4,828,754
40-44			7	17	15	1				40	4,331,880
45-49				6	14	12	2			34	3,974,874
50-54				2	3	12	6			23	2,814,201
55-59					1	2				3	330,085
60-64										0	0
65-69										0	0
Over 70										0	0
Total	0	16	69	46	39	27	8	0	0	205	\$21,949,202

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 40.4 years Service: 12.6 years Annual Pay: \$107,069

### DEVELOPMENT OF ACTUARIAL (MARKET-RELATED) VALUE OF ASSETS

1. Market value of assets at 01/01/2011

			Weight for	•	Weighted		
	Ite m	Amount	Timing		Amount		
	(a) Member Contributions	\$ 1,975,523	50.00%	\$	987,762		
	(b) City Contributions	10,915,951	50.00%		5,457,976		
	(c) Miscellaneous Revenue	-	50.00%		-		
	(d) Benefit Payments	(7,890,296)	50.00%		(3,945,148)		
	(e) Administration	(67,286)	50.00%		(33,643)		
	(f) Total			\$	2,466,947		
	<ul> <li>4. Assumed rate of return on pla</li> <li>5. Expected return [(3) * (4)]</li> </ul>	n assets for the ye	ar			\$	7.009 5,224,890
						—	
Actual Retur	6. Market value of assets at 01/0					\$	72,174,342
on Market	7. Income (less investment incom	ne) for prior plan y	ear				12,891,474
Value of	8. Disbursements paid in prior ye						7,957,582
1 , C	9. Market value of assets at 01/0	01/2012					78,051,129
Assets for							

Expected

\$ 72,174,342

## DEVELOPMENT OF ACTUARIAL (MARKET-RELATED) VALUE OF ASSETS (CONTINUED)

Actuarial
12. Market value of assets at 01/01/2012

Value of

Assets as of
01/01/2012
13. Deferred investment gains and (losses) for last 3 years:

				Percent	D e fe rre d
	Plan Year Beginning	G	ain/(Loss)	D e fe rre d	Amount
a)	2009	\$	671,605	25.00%	\$ 167,901
b)	2010		2,126,068	50.00%	1,063,034
c)	2011		(4,281,995)	75.00%	(3,211,496)
d)	Total	\$	(1,484,322)		\$ (1,980,561)

14. Item (12) less item 13(d)	\$ 80,031,690
15. 2012 Tax Year Levy (i.e., the 2011 Plan Year Contributions)	10,520,235
16. Interest Adjustment on item (15) to 01/01/2012	(349,940)
17. Actuarial Value of Plan Assets at 01/01/2012 [(14) + (15) + (16)]	\$ 90,201,985

Notes:

- (1) The calculated value is determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return) during each of the last four years at the rate of 25% per year.
- (2) Assumes the 2012 tax year levy is collected and deposited in the Pension Fund on July 1, 2012.



#### ACTUARIAL COST METHOD

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using the *individual entry-age actuarial* cost method having the following characteristics:

- the annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

*Financing of Unfunded Actuarial Accrued Liabilities.* Unfunded actuarial accrued liabilities were amortized by level (principal and interest combined) percent of payroll contributions over 34 future years.

Actuarial Value of Pension Plan Assets. The current market value of assets (including discounted contributions due for prior Plan Years and not received as of the valuation date) is reduced (increased) for the current year and each of two succeeding years, by a portion of the gain/(loss) in market value during the prior year. Such gain/(loss) is determined as the excess/(deficit) of the current market value of assets over the market value of assets as of the prior year, increased to reflect interest at the actuarial rate and adjusted to reflect contributions and benefit payments during the prior year. The portion of such gain/(loss) by which the current market value of assets is reduced (increased) shall be 75% in the current year; 50% in the first succeeding year and 25% in the second succeeding year.

#### **ACTUARIAL ASSUMPTIONS IN THE VALUATION PROCESS**

The contribution and benefit values of the System are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost method described on the previous page.

The principal areas of financial risk which require assumptions about future experiences are:

- long-term rates of investment return to be generated by the assets of the System
- patterns of pay increases to members
- rates of mortality among members, retirees and beneficiaries
- rates of withdrawal of active members
- rates of disability among members
- the age patterns of actual retirement.

In a valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives; a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

The assumptions used in this valuation are the same as those used in the previous valuation.

#### **VALUATION ASSUMPTIONS**

The assumed rate of investment return used was 7.00%, net of expenses, annually.

The mortality table used to measure retirement mortality is the 1994 Group Annuity Mortality Table. This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. This is a static table with no provisions for future mortality improvement.

_	Single Life Retirement Values					
Sample	Present \	Value of \$1	Future Life			
Attaine d_	Monthly for Life		Expectai	ncy (years)		
Ages	Men	Women	Men	Women		
50	\$ 147.78	\$ 154.93	30.69	34.89		
55	138.58	147.42	26.15	30.17		
60	127.35	137.85	21.83	25.59		
65	114.51	126.50	17.84	21.28		
70	100.68	113.58	14.29	17.31		
75	85.70	98.39	11.12	13.60		
80	70.13	81.90	8.37	10.31		

**The disability retirement mortality table** was based on 110% of the 1994 Group Annuity Mortality Table.

_		Single Life Reti	tirement Values			
Sample	Present '	Value of \$1	Futu	re Life		
Attained	Monthly for Life		Expectai	ncy (years)		
Ages	Men	Women	Men	Women		
50	\$ 146.24	\$ 153.76	29.80	34.03		
55	136.65	145.92	25.29	29.34		
60	125.02	135.95	21.01	24.78		
65	111.80	124.22	17.08	20.51		
70	97.71	110.98	13.60	16.60		
75	82.56	95.50	10.51	12.96		
80	66.96	78.84	7.85	9.75		

## VALUATION ASSUMPTIONS (CONTINUED)

**Rates of separation from active membership** are represented by the following table (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members terminating employment.

	Sample Employee Withdrawal						
Years of	Rate Per 1,000 Employees						
Service	Males	Females					
0	14.0	14.0					
5	9.0	9.0					
10	6.0	6.0					
15	3.0	3.0					
20	2.0	2.0					
25	1.0	1.0					
30 and Over	0.0	0.0					

*The rates of salary increase* used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries at the time upon which benefit amounts will be based.

#### Salary Increase Assumptions For an Individual Member

Years of		
Service	Increase	
1	30.00%	
2	27.50%	
3	20.00%	
4	15.00%	
>=5	5.25%	

## VALUATION ASSUMPTIONS (CONTINUED)

Sample rates of disability were as follows:

Employee Disablement Rate Per 1,000 Employees

Kate 1e1 1,000 Employees							
Age	M ale	Female					
25	1.0	1.0					
30	1.0	1.0					
35	1.2	1.2					
40	1.5	1.5					
45	2.1	2.1					
50	7.8	7.8					
55	13.6	13.6					
60	23.0	23.0					
65	33.5	33.5					

**Probabilities of retirement** for members eligible to retire during the next year were as follows:

Rates	of	R	e tire	me	nt
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Age	Rate	Age	Rate
50	5.0 %	60	30.0 %
51	5.0	61	50.0
52	5.0	62	50.0
53	10.0	63	50.0
54	20.0	64	50.0
55	25.0	65	100.0
56	30.0	66	100.0
57	30.0	67	100.0
58	30.0	68	100.0
59	30.0	69	100.0



GASB STATEMENT NOS. 25 AND 27

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF FUNDING PROGRESS

	Actuarial Valuation Date	GASB Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio	Covered Payroll (c)	UAAL as a Percentage of Payroll [(b - a)/c]
•	1/1/2007	\$60,375,256	\$128,989,157	\$68,613,901	46.8%	\$16,024,475	428.2%
	1/1/2007	\$00,373,230	\$128,989,137	\$08,013,901	40.870	\$10,024,473	428.270
	1/1/2008	64,196,270	151,255,803	87,059,533	42.4	17,078,653	509.8
	1/1/2009	65,005,952	163,067,860	98,061,908	39.9	17,828,326	550.0
	1/1/2010	68,158,236	176,212,143	108,053,907	38.7	19,834,928	544.8
	1/1/2011	73,457,570	192,271,318	118,813,748	38.2	20,431,852	581.5
	1/1/2012	80,031,690	205,192,787	125,161,097	39.0	21,949,202	570.2

### SCHEDULE OF EMPLOYER CONTRIBUTIONS

		Annual Required	Total Employer	Percentage	
_	Fiscal Year Ended	Contribution (a)	Contribution (b)	Contributed (b / a)	
	12/31/2007	\$ 5,978,716	\$ 4,761,086	79.6%	
	12/31/2008	8,198,450	5,434,554	66.3	
	12/31/2009	9,094,439	8,168,225	89.8	
	12/31/2010	10,224,930	9,477,572	92.7	
	12/31/2011	10,487,255	10,915,951	104.1	
	12/31/2012	11,097,584	TBD	TBD	

### **ANNUAL PENSION COST AND CONTRIBUTIONS**

#### Contribution rates:

City	Proceeds from a tax levy equal to the sum of: (a) annual normal cost plus (b) amortization of unfunded liability as a level percent of pay between now and 7/1/2046 plus (c) interest on (a) and (b) to date of payment.			
Plan members	9.455% of regular salary			
Annual Required Contribution for	Net Annual Normal Cost (Municipality Paid)	\$	4,983,217	
fiscal year ending December 31, 2012:	Annual Amortization Payments for Funding Unfunded Actuarial Accrued Liability Over 30		6 114 267	
	Years as a level percentage of payroll		6,114,367	
_	Annual Required Contribution (ARC)	\$	11,097,584	
Annual Pension Cost for fiscal year ending	Annual Required Contribution (ARC)	\$	11,097,584	
December 31, 2012:	Interest on Net Pension Obligation		411,630	
	Adjustment to ARC		(287,271)	
	Total Annual Pension Cost	\$	11,221,943	
Net Pension	Net Pension Obligation (NPO) at Beginning			
Obligation (NPO):	of year, January 01, 2011:	\$	6,178,463	
	Total Annual Pension Cost from Previous Year:		10,617,917	
	Total Employer Contribution for year ended December 31, 2011:		10,915,951	
	Net Pension Obligation (NPO) at End of year, December 31, 2011:	\$	5,880,429	

### PENSION COST SUMMARY FOR GASB #27

Year	Annual	Total	% of Annual	Net
Ended	Pension	Employer	Pension Cost	Pension
December 31	Cost	Contribution	Contributed	Obligation
2009	\$ 9,156,252	\$ 8,168,225	89.2%	\$ 5,364,173
2010	10,291,862	9,477,572	92.1	6,178,463
2011	10,617,917	10,915,951	102.8	5,880,429
2012	11,221,943	TBD	TBD	TBD

#### SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

The information requested in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	January 1, 2012		
Actuarial Cost Method and Amortization Method	Entry-Age-Normal  35 – Year Closed Level-Percentage-of-Pay Amortization (from January 1, 2011) for Funding.  34 years remaining  30 – Year Open Level-Percentage-of-Pay Amortization (from January 1, 2011) for GASB 25/27 Accounting.		
Actuarial Value of Assets 4-year smoothed market			
Actuarial Assumptions:			
Investment Rate of Return	7.00% per year		
Projected Salary Increases	5.25% per year with a three-year service-based select period		
Wage Inflation Increases	4.00% per year		
Cost-of-Living Increases	3.00% per year		